UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SIDLEY AUSTIN BROWN & WOOD LLP	DEBROW, JAMES J	
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/705,915	JEON ET AL.
	Examiner	Art Unit	
	James J. Debrow	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _17 January 2007_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _26,28-56 and 58-86_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _26, 28-56 and 58-86_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: RCE filled 17 Jan 2007.

2.   Claims 26, 28-56 and 58-86 are pending. Claims 26, 36, 46, 47, 57, 58, 69, 70 and 81 are independent claims.

Continued Examination Under 37 CFR 1.114

3.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 Jan 2007 has been entered.

Applicant's Response

4.   In Applicant's response dated 17 Jan. 2007, Applicant amended claims 33, 43, 55, 66 and 78; added new claims 81-86; argued against all objections and rejection previously set forth in previous Office Action.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   **Claims 26, 28-56 and 58-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azami et al. (Pub. No.: 2003/0009472 A1; Filing Date: Jul. 9, 2001)(hereinafter "Azami") in view of Reed et al. (Patent No.: 6,088,717; Filed Aug. 31, 1998) (hereinafter 'Reed').**

In regards to independent claim 26, Azami disclose *a document management system, comprising:*

a document storage device configured to store at least one XML-electronic document describing metadata related to a broadcasting program and comprising an upper element and a lower element (0004-0008; 0087-0092; Fig. 1; Fig. 25; Azami discloses a MPEG-7 description document which uses XML. The MPEG-7 description is divided into upper-rank structured metadata and lower-rank structure metadata respectively. Azami further discloses division, store and transmission procedures of the audio-visual contents on a channel of digital television broadcast, which includes a computer which operates in accordance with a control program.).

a document receiving device coupled to the document storage device (0004-0008; 0087-0092; Fig. 1; Fig. 25; Azami discloses receiving access units from the store system or the transmission system. Therefore Azami discloses a document receiving device coupled to the document storing device.).

Azami does not disclose expressly *a version value of the versions of the XML*

electronic document, wherein date information and time information of contents of the

XML electronic document are used as the version value.

However, Reed teaches *a version value of the versions of the XML electronic*

document, wherein date information and time information of contents of the XML

electronic document are used as the version value (col.8, lines 12-14; col. 20, lines 17-

29; col. 30, lines 52-55; col. 59, lines 47-67; Reed teaches multiple versions of objects

instances may be maintained in the database so that the user can revert to previous

data. Reed teaches a version value that is used to manage different versions of

communication objects. The communication objects contain a combination of data,

metadata and instructions. The version value is used to coordinate updates each time

an element within the communication object is changed. The version value is

determined by the date and time of the most recent existing communication object

version. Thus, Reed teaches/suggests using the date information and time information

of the document contents as the version value. It has been established and is well

known to one of ordinary skill in the art that date/time stamps are typically used to

distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 28, Azami discloses structured metadata file

description of a tree structured is separated or divided at an arbitrary position into

upper-rank structure metadata and lower-rank structured metadata. Azami further

discloses the upper-rank structure metadata and lower-rank structured metadata are

connected and integrated into the original structured metadata (0087-0089).

Azami does not disclose expressly *the document management system of claim*

26, wherein a lower element version value is updated when content of the lower

element of the XML electronic document is changed, and wherein the updated lower

element version value is used as a corresponding upper element version value.

However, Reed teaches *the document management system of claim 26, wherein*

a lower element version value is updated when content of the lower element of the XML

electronic document is changed, and wherein the updated lower element version value

is used as a corresponding upper element version value (col. 20, lines 17-29; The

version value is used to coordinate updates each time an element within the

communication object is changed. Thus, when an element is updated/changed, the

version value changes.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 29, Azami does not disclose expressly *the document management system of claim 26, wherein each element version value includes date and time information according to when said contents of the corresponding element was updated.*

However, Reed teaches *each element version value includes date and time information according to when said contents of the corresponding element was updated* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 30, Azami discloses *the document management*

system of claim 26, wherein the document receiving device is configured to request the

XML documents (0004-0008; 0087-0092; Fig. 1; Fig. 25; Azami discloses receiving

access units from the store system or the transmission system.).

In regards to dependent claim 31, Azami does not disclose expressly *the*

document management system of claim 29,wherein each element version value

includes date and time information when contents of the corresponding element was

changed.

However, Reed teaches *each element version value includes date and time*

information when contents of the corresponding element was changed (col.8, lines 12-

14; col. 20, lines 17-29; The version value is used to coordinate updates each time an

element within the communication object is changed. The version value is determined

by the date and time of the most recent existing communication object version. Thus,

Reed teaches/suggests using the date information and time information of the

document contents as the version value. It has been established and is well known to

one of ordinary skill in the art that date/time stamps are typically used to distinguish

different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 32, Azami discloses *the document management system of claim 28, wherein a type of the content of the lower element is included in the upper element version value* (0089; 0092; Azami discloses the lower-ranks structure metadata and the upper-ranked structured metadata are integrated into the original structured metadata. Thus the type of the content of the lower element is included in the upper element version value.).

In regards to dependent claim 33, Azami discloses *the document management system of claim 26, wherein version information of said contents is defined by a syntax of said electronic document* (0004-0006; 0093).

In regards to dependent claim 34, Azami discloses *the document management system of claim 33, wherein said syntax is XML schema* (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 35, Azami discloses *the document management system of claim 34, wherein said contents includes at least one number selected from*

the group of title, synopsis, review, and casting of said broadcasting program (0199;

Azami discloses structured metadata representing an electronic program guide

including, which includes broadcasting programs titles, broadcasting dates,

broadcasting channels and broadcasting programs outlines.).

In regards to independent claim 36, Azami discloses *for an electronic*

document describing metadata related to a broadcasting program and having a plurality

of elements, wherein each element is based on XML, a method for updating one of the

elements stored in a client, the method comprising (0004-0008; 0097; Azami discloses

generally, there is a plurality of lower-ranked MPEG-7 description to be connected with

an upper-ranked MPEG description stored in the Description of an access unit.);

requesting an updated version of said element of the electronic document

describing metadata related to a broadcasting program (0188-0192; Azami discloses a

user-side computer can access arbitrary one among the MPEG-7 access units in the

video database. The database holds a plurality of video content and MPEG-7

descriptions corresponding the video contents respectively. Using the broadest

interpretation, the Examiner concludes that the requested video-segment information

downloaded to the user-side computer is an updated version of the video-segment

information/metadata.).

updating said element stored in said client with said received updated version of

said element and without replacing the electronic document in its entirety (0150, lines

1-4; 0203-0205 Azami discloses the upper-rank information and the lower-ranked

information can be transmitted separately. Therefore Azami teaches the concept of

receiving updated version of said element and without replacing the electronic

document in its entirety.).

Azami does not disclose expressly *receiving said updated version of said*

element, wherein said updated version is identified by an element identification

including an element version, wherein said element version comprises date information

and/or time information;

Reed teaches *receiving said updated version of said element, wherein said*

updated version is identified by an element identification including an element version,

wherein said element version comprises date information and/or time information (col.8,

lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each

time an element within the communication object is changed. The version value is

determined by the date and time of the most recent existing communication object

version. Thus, Reed teaches/suggests using the date information and time information

of the document contents as the version value. It has been established and is well

known to one of ordinary skill in the art that date/time stamps are typically used to

distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 37, Azami does not disclose expressly *the method of claim 36, wherein said element version includes date and time information according to when contents of the element were updated.*

Reed teaches *element version includes date and time information according to when contents of the element were updated* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 38, Azami does not disclose expressly *the method of claim 37, wherein said element version and time information according to when said contents of the element were changed.*

Reed teaches *element version and time information according to when said*

contents of the element were changed (col.8, lines 12-14; col. 20, lines 17-29; The

version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. Thus, Reed teaches/suggests

using the date information and time information of the document contents as the version

value. It has been established and is well known to one of ordinary skill in the art that

date/time stamps are typically used to distinguish different versions of particular

elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 39, Azami does not expressly disclose *the*

method of claim 36, wherein said requesting comprises transmitting a current version of

said element, and wherein said element version of said received updated version is

later than an element version of said current version.

However, Reed teaches *transmitting a current version of said element, and*

wherein said element version of said received updated version is later than an element

version of said current version (col.8, lines 12-14; col. 20, lines 17-29; The version value

is used to coordinate updates each time an element within the communication object is

changed. The version value is determined by the date and time of the most recent

existing communication object version. It has been established and is well known in the

art that an updated element version is typically later than an element version of the

current version).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 40, Azami discloses *the method of claim 36,*

wherein said element comprises an upper structure and a lower structure in hierarchical

arrangement, wherein when said lower structure of said element is changed, a version

value of the lower structure is updated and the updated version value is reflected in a

version value of said upper structure (0089; 0092; Azami discloses the lower-ranks

structure metadata and the upper-ranked structured metadata are integrated into the

original structured metadata, thus the lower-ranked structure updated version value is

reflected in a version value of said upper structure.).

In regards to dependent claim 41, Azami discloses *the method of claim 40,*

wherein a largest value of the version values of the lower structures is used as the

version value of the upper structure (0089; 0092; Azami discloses the lower-ranks

structure metadata and the upper-ranked structured metadata are integrated into the

original structured metadata. Thus the type of the content of the lower element is

included in the upper element version value, as well as the largest value of the version

values of the lower structures).

In regards to dependent claim 42, Azami discloses *the method of claim 41,*

wherein a type of the updated lower structure is included in the version value of the

upper structure (0089; 0092; Azami discloses the lower-ranks structure metadata and

the upper-ranked structured metadata are integrated into the original structured

metadata. Thus the type of the content of the lower element is included in the upper

element version value.).

In regards to dependent claim 43, Azami discloses *the method of claim 37,*

wherein said element version of said contents is defined by a syntax of said electronic

document (0004-0006; 0093).

In regards to dependent claim 44, Azami discloses *the method of claim 43, wherein*

said syntax is XML schema (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 45, Azami discloses *the method of claim 44,*

wherein said contents includes at least one member selected from the group of title,

synopsis, review, and casting of the broadcasting program (0199; Azami discloses

structured metadata representing an electronic program guide including, which includes

broadcasting programs titles, broadcasting dates, broadcasting channels and

broadcasting programs outlines.).

In regards to independent claim 46, Azami discloses *for an electronic*

document describing metadata related to a television broadcasting program and having

a plurality of elements, wherein each element is based on XML, a method for updating

one of the elements stored in a client, the method comprising:

requesting from a provider an updated version of said element of the electronic

document describing metadata related to a television broadcasting program (0188-

0192; Azami discloses a user-side computer can access arbitrary one among the

MPEG-7 access units in the video database. The database holds a plurality of video

content and MPEG-7 descriptions corresponding the video contents respectively. Using

the broadest interpretation, the Examiner concludes that the requested video-segment

information downloaded to the user-side computer is an updated version of the video-

segment information/metadata.).

updating said element stored in said client with a version later than a version of

said element stored in said client and without replacing the electronic document in its

entirety (0150, lines 1-4; 0203-0205 Azami discloses the upper-rank information and

the lower-ranked information can be transmitted separately. Therefore Azami teaches

the concept of receiving updated version of said element and without replacing the

electronic document in its entirety).

Azami does not disclose expressly *wherein said later version is identified by an element identification including an element version from said provider, wherein said element version comprises date information and/or time information.*

Reed teaches *wherein said later version is identified by an element identification including an element version from said provider, wherein said element version comprises date information and/or time information* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to independent claim 47, Azami discloses *for an electronic document describing metadata related to a broadcasting program and having a plurality of elements, wherein each element is based on XML, a method for processing a*

response to a request for updating one of the elements stored in a client, the method

comprising (0004-0008; 0097; Azami discloses generally, there is a plurality of lower-

ranked MPEG-7 description to be connected with an upper-ranked MPEG description

stored in the Description of an access unit.):

updating said element stored in said client with an updated version of said

element and without replacing the electronic document in its entirety(0150, lines 1-4;

0203-0205 Azami discloses the upper-rank information and the lower-ranked

information can be transmitted separately. Therefore Azami teaches the concept of

receiving updated version of said element and without replacing the electronic

document in its entirety).

Azami does not disclose expressly *wherein said updated version is identified by*

an element identification including an element version, wherein said element version

comprises date information and/or time information.

Reed teaches *wherein said updated version is identified by an element*

identification including an element version, wherein said element version comprises

date information and/or time information (col.8, lines 12-14; col. 20, lines 17-29; The

version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. Thus, Reed teaches/suggests

using the date information and time information of the document contents as the version

value. It has been established and is well known to one of ordinary skill in the art that

date/time stamps are typically used to distinguish different versions of particular

elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 48, Azami does not disclose expressly *the*

method of claim 47, comprising receiving said updated version of said element identified

by said element identification and said element version from a provider.

Reed teaches *receiving said updated version of said element identified by said*

element identification and said element version from a provider (col.8, lines 12-14; col.

20, lines 17-29; The version value is used to coordinate updates each time an element

within the communication object is changed. The version value is determined by the

date and time of the most recent existing communication object version. Thus, Reed

teaches/suggests using the date information and time information of the document

contents as the version value. It has been established and is well known to one of

ordinary skill in the art that date/time stamps are typically used to distinguish different

versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 49, Azami does not disclose expressly *the*

method of claim 47, wherein said element version includes date and time information

according to when said metadata of the element were updated.

Reed teaches *wherein said element version includes date and time information*

according to when said metadata of the element were updated (col.8, lines 12-14; col.

20, lines 17-29; The version value is used to coordinate updates each time an element

within the communication object is changed. The version value is determined by the

date and time of the most recent existing communication object version. Thus, Reed

teaches/suggests using the date information and time information of the document

contents as the version value. It has been established and is well known to one of

ordinary skill in the art that date/time stamps are typically used to distinguish different

versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 50, Azami does not disclose expressly *the method of claim 49, wherein said element version includes date and time information according to when said metadata of the element were changed.*

Reed teaches *wherein said element version includes date and time information according to when said metadata of the element were changed* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 51, Azami does not disclose expressly *the method of claim 47, wherein said request comprises a selected version of said element, and wherein said received updated version of said element is later than said selected version.*

However, Reed *wherein said request comprises a selected version of said element, and wherein said received updated version of said element is later than said selected version* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. It has been established and is well known in the art that an updated element version is typically later than an element version of the current version).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 52, Azami does not disclose expressly *the method of claim 47, wherein said element comprises an upper structure and a lower structure in hierarchical arrangement, wherein when said lower structure of said element is changed, a version value of the lower structure is updated and the updated version value is reflected in a version value of said upper structure.*

However, Reed *when said lower structure of said element is changed, a version value of the lower structure is updated and the updated version value is reflected in a version value of said upper structure* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. It has been established and is

well known in the art that an *updated element version is typically later than an element*

version of the current version).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 53, Azami discloses *the method of claim 52,*

wherein a largest value of the version values of the lower structures is used as the

version value of the upper structure (0089; 0092; Azami discloses the lower-ranks

structure metadata and the upper-ranked structured metadata are integrated into the

original structured metadata. Thus the type of the content of the lower element is

included in the upper element version value, as well as the largest value of the version

values of the lower structures.).

In regards to dependent claim 54, Azami discloses *the method of claim 53,*

wherein a type of the updated lower structure is included in the version value of the

upper structure (0089; 0092; Azami discloses the lower-ranks structure metadata and

the upper-ranked structured metadata are integrated into the original structured

metadata. Thus the type of the content of the lower element is included in the upper

element version value.). .

In regards to dependent claim 55, Azami discloses *the method of claim 47,*

wherein said element version is defined by a syntax of said electronic document, and

wherein said syntax is XML schema (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 56, Azami discloses *the method of claim 47,*

wherein said metadata includes at least one member selected from the group of title,

synopsis, review, and casting of said broadcasting program (0199; Azami discloses

structured metadata representing an electronic program guide including, which includes

broadcasting programs titles, broadcasting dates, broadcasting channels and

broadcasting programs outlines.).

In regards to independent claim 58, Azami discloses *for an electronic*

document describing metadata related to a broadcasting program and having a plurality

of elements, wherein each element is based on XML, a method for providing an

updated version of one of the elements, the method comprising:

receiving a request from a client for the updated version of said element of the

electronic document describing metadata related to a broadcasting program (0188-

0192; Azami discloses a user-side computer can access arbitrary one among the

MPEG-7 access units in the video database. The database holds a plurality of video

content and MPEG-7 descriptions corresponding the video contents respectively. Using the broadest interpretation, the Examiner concludes that the requested video-segment information downloaded to the user-side computer is an updated version of the video-segment information/metadata.).

Azami does not disclose expressly *determining whether a provider has a capability of handling said requests for the updated version; and*

supplying said updated version of said element in accordance with a determined result, wherein said updated version is identified by an element identification including an element version, wherein said element version comprises date information and/or time information.

However, Reed teaches *determining whether a provider has a capability of handling said requests for the updated version* (col. 39, lines 20-44; col. 59, lines 51-66; Reed teaches referring to the date/time of the object to determine if there has been a change within the object. Reed also teaches the version value of the updated object is compared with the version of the most recent version stored in the database.).

supplying said updated version of said element in accordance with a determined result, wherein said updated version is identified by an element identification including an element version, wherein said element version comprises date information and/or time information.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 59, Azami does not expressly disclose *the method of claim 58, wherein said request for said updated version of said element identifies said element using element identification and a current element version.*

Reed teaches *wherein said request for said updated version of said element identifies said element using element identification and a current element version* (col. 39, lines 20-44; Reed teaches the version value of the updated object is compared with the version of the most recent version stored in the database.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 60, Azami does not expressly disclose *the method of claim 58, comprising identifying a version of said element later than a requested version of said element in said provider as said updated version of said element.*

Reed teaches *comprising identifying a version of said element later than a requested version of said element in said provider as said updated version of said element* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. It has been established and is well known in the art that an *updated element version is typically later than an element version of the current version*).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 61, Azami does not expressly disclose *the method of claim 58, wherein said element version includes date and time information according to when said metadata of the element were updated.*

Reed teaches *wherein said element version includes date and time information according to when said metadata of the element were updated* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of

ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 62, Azami does not expressly disclose *the method of claim 61, wherein said element version includes date and time information according to when said metadata of the element were changed.*

However, Reed teaches *wherein said element version includes date and time information according to when said metadata of the element were changed* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. It has been established and is well known in the art that an updated element version is typically later than an element version of the current version).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 63, Azami discloses *the method of claim 58,*

wherein said element comprises an upper structure and a lower structure in hierarchical

arrangement, wherein when a said lower structure of said element is changed, a version

value of the lower structure is updated and the updated version value is reflected in a

version value of said upper structure (0089; 0092; Azami discloses the lower-ranks

structure metadata and the upper-ranked structured metadata are integrated into the

original structured metadata, thus the lower-ranked structure updated version value is

reflected in a version value of said upper structure.).

In regards to dependent claim 64, Azami discloses *the method of claim 63,*

wherein a largest value of the version values of the lower structures is used as the

version value of the upper structure (0089; 0092; Azami discloses the lower-ranks

structure metadata and the upper-ranked structured metadata are integrated into the

original structured metadata. Thus the type of the content of the lower element is

included in the upper element version value, as well as the largest value of the version

values of the lower structures).

In regards to dependent claim 65, Azami discloses *the method of claim 64,*

wherein a type of the updated lower structure is included in the version value of the

upper structure (0089; 0092; Azami discloses the lower-ranks structure metadata and

the upper-ranked structured metadata are integrated into the original structured

metadata. Thus the type of the content of the lower element is included in the upper

element version value.).

In regards to dependent claim 66, Azami discloses *the method of claim 58,*

wherein said element version is defined by a syntax of said electronic document (0004-

0006; 0093).

In regards to dependent claim 67, Azami discloses *the method of claim 66,*

wherein said syntax is XML schema (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 68, Azami discloses *the method of claim 67,*

wherein said metadata includes at least one member selected from the group of title,

synopsis, review, and casting of the broadcasting program (0199; Azami discloses

structured metadata representing an electronic program guide including, which includes

broadcasting programs titles, broadcasting dates, broadcasting channels and

broadcasting programs outlines.).

In regards to independent claim 69, Azami discloses *for an electronic*

document describing metadata related to a broadcasting program and having a plurality

of elements, wherein each element is based on XML, a method for replying to a request

for updating one of the elements stored in a client, the method comprising:

supplying said client with an updated version of said element of the electronic

document describing metadata related to a broadcasting program (0188-0192; Azami

discloses a user-side computer can access arbitrary one among the MPEG-7 access

units in the video database. The database holds a plurality of video content and MPEG-

7 descriptions corresponding the video contents respectively. Using the broadest

interpretation, the Examiner concludes that the requested video-segment information

downloaded to the user-side computer is an updated version of the video-segment

information/metadata.).

Azami does not disclose expressly *wherein the updated version is identified by*

an element identification including an element version, wherein said element version

comprises date information and/or time information.

Reed teaches *wherein the updated version is identified by an element*

identification including an element version, wherein said element version comprises

date information and/or time information (col.8, lines 12-14; col. 20, lines 17-29; The

version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. Thus, Reed teaches/suggests

using the date information and time information of the document contents as the version

value. It has been established and is well known to one of ordinary skill in the art that

date/time stamps are typically used to distinguish different versions of particular

elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to independent claim 70, Azami discloses *for an electronic*

document describing metadata related to a television broadcasting program and having

a plurality of elements, wherein each element is based on XML, a method for managing

one of the elements stored in a Client, the method comprising (0004-0008; 0087-0092;

Fig. 1; Fig. 25; Azami discloses a MPEG-7 description document which uses XML. The

MPEG-7 description is divided into upper-rank structured metadata and lower-rank

structure metadata respectively. Azami further discloses division, store and

transmission procedures of the audio-visual contents on a channel of digital television

broadcast, which includes a computer which operates in accordance with a control

program.):

Azami does not disclose expressly *version information comprises date*

information and/or time information.

However, Reed teaches *version information comprises date information and/or*

time information (col.8, lines 12-14; col. 20, lines 17-29; col. 30, lines 52-55; col. 59,

lines 47-67; Reed teaches multiple versions of objects instances may be maintained in

the database so that the user can revert to previous data. Reed teaches a version

value that is used to manage different versions of communication objects. The

communication objects contain a combination of data, metadata and instructions. The

version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. Thus, Reed teaches/suggests

using the date information and time information of the document contents as the version

value. It has been established and is well known to one of ordinary skill in the art that

date/time stamps are typically used to distinguish different versions of particular

elements, objects, documents, etc.).

In regards to dependent claim 71, Azami does not disclose expressly *the*

method of claim 70, comprising transmitting updated versions of said element identified

by said element information including at least said element version information.

However, Reed teaches *transmitting updated versions of said element identified*

by said element information including at least said element version information (col.8,

lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each

time an element within the communication object is changed. The version value is

determined by the date and time of the most recent existing communication object

version. It has been established and is well known in the art that an updated element

version is typically later than an element version of the current version).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 72, Azami does not disclose expressly *the method of claim 71, wherein each element version information includes date and time information according to when said metadata of said element were updated.*

Reed teaches *element version information includes date and time information according to when said metadata of said element were updated* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 73, Azami does not disclose expressly *the method of claim 72, wherein each element version information includes date and time information according to when said metadata of the element were changed.*

Reed teaches *element version information includes date and time information according to when said metadata of the element were changed* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed. The version value is determined by the date and time of the most recent existing communication object version. Thus, Reed teaches/suggests using the date information and time information of the document contents as the version value. It has been established and is well known to one of ordinary skill in the art that date/time stamps are typically used to distinguish different versions of particular elements, objects, documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 74, Azami does not disclose expressly *the method of claim 71, comprising receiving a request for an updated version of said element.* However Azami discloses a user-side computer can access arbitrary one among the MPEG-7 access units in the video database. The database holds a plurality of video content and MPEG-7 descriptions corresponding the video contents

respectively. Using the broadest interpretation, the Examiner concludes that the

requested video-segment information downloaded to the user-side computer is an

updated version of the video-segment information/metadata (0188-0192).

In regards to dependent claim 75, Azami does not disclose expressly *the*

method of claim 70, wherein said element comprises an upper structure and a lower

structure in hierarchical arrangement, wherein when said lower structure of said

element is changed, a version value of the lower structure is updated and the updated

version value is reflected in a version value of said upper structure.

However, Reed *when said lower structure of said element is changed, a version*

value of the lower structure is updated and the updated version value is reflected in a

version value of said upper structure (col.8, lines 12-14; col. 20, lines 17-29; The

version value is used to coordinate updates each time an element within the

communication object is changed. The version value is determined by the date and time

of the most recent existing communication object version. It has been established and is

well known in the art that an *updated element version is typically later than an element*

version of the current version).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 76, Azami disclose *the method of claim 75, wherein a largest value of the version values of the lower structures is used as the version value of the upper structure* (0089; 0092; Azami discloses the lower-ranks structure metadata and the upper-ranked structured metadata are integrated into the original structured metadata. Thus the type of the content of the lower element is included in the upper element version value, as well as the largest value of the version values of the lower structures.).

In regards to dependent claim 77, Azami disclose *the method of claim 76, wherein a type of the updated lower structure is included in the version value of the upper structure* (0089; 0092; Azami discloses the lower-ranks structure metadata and the upper-ranked structured metadata are integrated into the original structured metadata. Thus the type of the content of the lower element is included in the upper element version value.).

In regards to dependent claim 78, Azami disclose *the method of claim 70, wherein said element version information is defined by a syntax of said electronic document* (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 79, Azami disclose *the method of claim 78, wherein said syntax is XML schema* (0004-0006; Azami discloses an XML schema.).

In regards to dependent claim 80, Azami disclose *the method of claim 79,*

wherein said metadata includes at least one member selected from the group of title,

synopsis, review, and casting of the television broadcasting program (0199; Azami

discloses structured metadata representing an electronic program guide including,

which includes broadcasting programs titles, broadcasting dates, broadcasting channels

and broadcasting programs outlines.).

In regards to independent claim 81, Azami disclose *a method for processing a*

first metadata stored in a client, wherein the first metadata is related to a broadcast

program and is based on markup language, the method comprising (0004-0008):

Azami does not disclose expressly *the requesting an updated version of the first*

metadata by the client; and receiving a final version and an identifier of the first

metadata if the identifier of the first metadata is reused as an identifier of a second

metadata and the requested updated version is a version prior to a deletion of the first

metadata in a server.

However, Reed *requesting an updated version of the first metadata by the client;*

and receiving a final version and an identifier of the first metadata if the identifier of the

first metadata is reused as an identifier of a second metadata and the requested

updated version is a version prior to a deletion of the first metadata in a server (col. 30,

lines 52-67; col. 39, line 12- col. 40, line 14; Reed teaches/suggests determining

previous various of objects already stored in the database, thus determining identifiers.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 82, Azami does not disclose expressly *the method of claim 81, wherein the first metadata is stored in the client and the server.*

However, Reed *the first metadata is stored in the client and the server* (col. 8, lines 20-34; Reed teaches updating the transferred information in the consumer computer when the information in the provider computer has changed. Thus the first metadata is stored in the client and the server.).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version value is to coordinate updates within an object/document each time an element within the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 83, Azami does not expressly disclose *the method of claim 81, wherein the version information includes at least one of date and time information.*

Reed teaches *version information includes at least one of date and time information* (col.8, lines 12-14; col. 20, lines 17-29; The version value is used to coordinate updates each time an element within the communication object is changed.

The version value is determined by the date and time of the most recent existing

communication object version. Thus, Reed teaches/suggests using the date information

and time information of the document contents as the version value. It has been

established and is well known to one of ordinary skill in the art that date/time stamps are

typically used to distinguish different versions of particular elements, objects,

documents, etc.).

Therefore, at the time of the invention it would have been obvious to a person of

ordinary skill in the art to combine Azami with Reed for the benefit of utilizing a version

value is to coordinate updates within an object/document each time an element within

the object/document is changed (col. 20, lines 24-25).

In regards to dependent claim 84, Azami discloses *the method of claim 81,*

wherein the broadcast program is a television broadcast program (0004; 0008; 0203).

In regards to dependent claim 85, Azami discloses *the method of claim 81,*

wherein the metadata is defined by a syntax of an electronic document (0004-0006).

In regards to dependent claim 86, Azami discloses *the method of claim 85,*

wherein the syntax is XML schema (0004-0006; Azami discloses an XML schema.).

Note

7.   It is noted that any citations to specific, pages, columns, lines, or figures in the

prior art references and any interpretation of the reference should not be considered to

be limiting in any way. A reference is relevant for all it contains and may be relied upon

for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

Response to Arguments

8.   Upon further consideration of the Azami reference, the Examiner has determined

that Azami wasn't appropriately reviewed. Upon a more intense review of the Azami

reference, the Examiner concludes that the Azami reference can be used as prior art in

addressing a greater number of claim limitations of the claimed invention then

previously preceived.

    Furthermore, applicant argues the use of the additional references, Kim,

Anderson and Baker, as mentioned in the previous objection. Applicant argues the

Examiners rejection constitutes *impermissible hindsight* in that references are *not even*

in the same technology area or field. Therefore, Applicant argues *one of ordinary skill in*

the art would not turn to such diverse fields for teaching or suggestions.

    The Examiner does not agree with Applicant's argument in its entirety as the

Kim, Anderson and Baker references were used as teaching reference to teach specific

concepts.

    However due to the Examiner's admitted mis-interpretation of the Azami

reference, the Examiner had withdrawn the 35 USC 103 rejection of the previous office

action. However, upon further consideration, a new ground(s) of rejection is made in

view Azami and Reed.

Claim Rejections - 35 USC § 112

9.   In regards to Claim 28, Applicant argues the Examiners reason of the claim as

being indefinite, as stated in previous office action, is not an appropriate basis for the

rejection.

The Examiner disagrees.

However, upon further consideration in view of the Examiners gained knowledge

concerning the terminology in question while researching prior art, the Examiner

withdraws the 35 USC 112 rejection of Claim 28.

Specification

10.   The Applicant argues the terms "lower element" and "upper element" are

supported in the specification of the Application based on *Merriam-Webster's Collegiate

Dictionary* definition of the term "element". While the Examiner does not argue

Merriam-Webster's Collegiate Dictionary definition of the term "element", the Examiner

does maintain that specification makes no mention of a "lower element", however the

specification recites the term "lower structure". Applicant's request to withdraw the

rejection is denied.

Claim Objections

11.   Applicant's request to withdraw the objection to Claim 28 is denied based on the

reason that the specification provides no support to the terms of "lower element" and
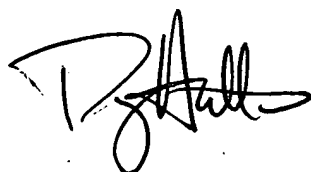
"upper element".

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James J. Debrow whose telephone number is 571-272-

5768. The examiner can normally be reached on 8:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JAMES DEBROW
EXAMINER
ART UNIT 2176

Doug Hutton
Primary Examiner
Technology Center 2100